

The Marble Hill Press.

Hill & Chandler, Publishers.

MARBLE HILL, MISSOURI.

The moving showman of the Paris exposition was a great success; 5,947,300 persons paid for the privilege of using the platform, while only 2,602,482 used the railway that carried passengers in the other direction.

The Argentine republic is rapidly becoming an Eldorado for people who are interested in the exploitation of electrical schemes. Enterprises of this sort recently undertaken in the republic represent an invested capital of \$10,000,000.

There is said to be a wide-spread feeling throughout Canada in favor of continuing the celebration of the queen's birthday. The Toronto Globe thinks much a perpetuation of the custom "would resemble the homage paid by Americans to the majestic figure of Washington."

The reported offer of an opal for the English regalia by the commonwealth of Australia is looked upon with disfavor by the superstitious, as the stone is said to be unlucky, except to those born in the month of October. None of the children of the late queen or of the present king were born in that month.

The business of human emotions, solicited, is about to take on the antagonism of MOSF national game may be better than when he can't after a year. It can hardly be said that he is a liar.

The geographical congress of Italy, which will be held at Milan this spring, has authorized the Touring club of Italy to organize a special expedition of the methods of locomotion used for long voyages during the nineteenth century. The Touring club has received the idea with enthusiasm, and will endeavor to make this expedition as complete and as interesting as possible.

One of the special bicycles built for the use of the British troops in South Africa, which went through the campaign with Gen. Buller, is now in the possession of the British War Museum, where its excellent condition, considering the knocking about it has received, excited general comment. England seems busy with the organization of cyclist soldiers, and many companies of wheelmen figured in the Easter maneuvers.

The constitution of the United States, in prescribing the methods by which it may be amended, virtually forbids amendment in one particular. No state is to be deprived without its consent of its equal suffrage in the senate. The first state to ratify the constitution was Delaware, and yet the senate has no members from Delaware. It is greatly to be regretted, even if Delaware's failure to be represented is by its own choice.

President Hadley of Yale made a striking classification of society in a recent address on the development of a public conscience. Humanity, he said, is made up of two classes. Individuals of the one participate in the business of life for what they can get out of it; the other for what they can put into it. It is the latter, however, a paradox that the one who put most into life is also, in the largest and best sense, those who get most out of it.

The smallest man in this year's batch of conscripts in France comes from Cuneil, near Montauban, in the Department of Tarn. He is named Emile Mayot, stands only three feet nine and three-quarters inches in height, and weighs forty-two pounds in his clothes. He is, however, declared to be constitutionally quite sound and has never had a day's sickness in his life. The biggest man comes from the Department of the Herault. He stands six feet six inches, and is named Eugene Casanave. As usual, a girl has been by some accident inscribed on the list.

Prof. Gustave Bischof of the Glasgow university has invented a new process for the manufacture of white lead. His plan is the conversion of metallic lead into white lead by means of water gas at a temperature of 300 degrees centigrade, to suboxide. Sufficient water is then added to moisten this suboxide, which is converted into hydrate. This substance is then inserted into a gas-tight apparatus, and by means of carbonic acid diluted with water, and under the influence of white lead, under the old process white lead occupied from two to three months in its manufacture. But Prof. Bischof is enabled to make a purer article with less than forty-eight hours at a much cheaper price and with perfect safety to the employee.

The defense of Gibraltar is now made more complete by a provision to keep mosquitoes from introducing germs of disease into the huge reservoirs which have been cut out of the side of the rock. Each tank is rendered mosquito-proof by means of gauze wires. The millions of gallons of water, which a stage would render an important resource, may be reckoned among the assets of defensive works which are a symbol, the world over, for impregnable. Not even the mosquito will be permitted to capture the stronghold.

One still hears predictions that the bicycle will soon be the way of the roller-skating rink and the toboggan slide. Very likely those who have taken it up merely as a fashion or a fad are now creating business for the second-hand stores and junk-shops; but the wheel is to be classed among the permanent utilities, and not merely as a provisional pastime. The demand may increase less rapidly than heretofore, but there is no probability of a falling off—except on the part of the novices.

In a recent year in London no fewer than 37,497 umbrellas found their way through the houses of the bus and tramway conductors and cab drivers, into the lost property office at Scotland Yard. Nearly half of the total number of articles lost belong to forgetful Londoners, who, however, lost their way, and not to the thieves.

Ernest Adolph, of Prussia, third son of the Kaiser, who is to be the "heir apparent" for his generation, is about to begin his naval career on the training ship Charlotte.

Hollow Ash... Hall

BY MARGARET BLOUNT.

CHAPTER VII.—(Continued.)

"But, Mr. Magnus, do you pretend to be wiser than the whole country side?"

"By no means, my love."

"Well, every one says the place is full of ghosts!"

"Yes, my dear."

"What every one says must be true."

Mr. Magnus did not dare to say so.

"And so the place is haunted," replied his better half, triumphantly.

"Oh! I would not live in that old house for the whole world," said Kitty, shrugging her shoulders.

"Does Mr. Cowley like it?" asked Mrs. Magnus.

"No—I think not."

"Then why does he stay?"

Mr. Magnus coughed and looked embarrassed.

"My dear, Mr. Cowley is a very peculiar man—very. I am afraid he generally does what he likes, without consulting his wife."

"And she lets him?" exclaimed Mrs. Magnus, shutting her lips, viciously.

"I am afraid she does."

"Well, if women will be fools, they must. But I only wish I was Mrs. Cowley! Do you look quite well?"

"I am rather tired," replied the governess, very quickly.

"Then pray don't sit up longer than you like."

Miss Marjorie took the hint, put away her work, said good-night, and left the room. Two pairs of eyes followed her with anything but loving looks.

"Nasty, proud thing! I hate her!" said Kitty in a low tone.

"And so do I!" replied her mother, with emphasis. "But she will be going next month, so we need not trouble ourselves about her."

CHAPTER VIII.

Miss Marjorie did not, however, go to her own room. She took a cloak from its peg in the hall, threw it over her head, opened the front door softly, and went out. Mrs. Magnus would have been shocked out of all propriety if she had seen her pacing up and down the garden walks alone, but just at that moment Miss Marjorie cared little for Mrs. Magnus, or anything she could say.

The night was dark and starless, the air chill and raw. But after that heated room it was a positive luxury to feel the fresh, damp wind coming from the hills. After those sharp, biting winds which were nothing but to listen to the leader's breath and whispering of the coming of the rain. Storm and cold and darkness—they were all preferable to that snug parlour and its disagreeable inmates; and so Miss Marjorie paced up and down, up and down, and thought.

Thought of another time which had been far happier than this. A time when she was also a companion, but not Miss Magnus's companion! A time when there was one voice that always softened when it spoke her name; when there were eyes that brightened at her coming—lips that welcomed her as only privileged lips might do. She thought of long, pleasant evenings, spent with books and work and music, around a cottage fire. Of quiet walks and talks by summer moonlight. Alas! where had those blissful moments fled? Why had the dearest, the sweetest of life failed her? Why, from that wealth of love and tenderness had she been cast out into the cold, dark night?

She had been cruelly slandered; she had been cruelly deserted; she had been heartlessly deceived! Over and over again she said this to herself. Yet on that night, as she walked up and down the gravel path, the sense of injury and of wrong seemed to widen and widen, until it came a wild yearning for the old time—but for one moment of the happiness of yore!

"Oh, that it were possible in this dull life of pain, To find the arm of my true love Around me once again!"

She murmured, and she clasped her hands above her aching head. Where was he? What was he doing now? Beautiful and bright, he had risen like a star above her lonely path; had won her heart, and worn it for a time; had bound her to him by the most sacred ties; then left her for years, perhaps forever! Where was he—where was he? And she stretched out her arms to the sudden night sky in her vain and passionate appeal to him who would come no more.

The sky grew darker. A drop of rain touched her cheek. She turned to go in, but a strange, uneasy feeling, like a fingered moment behind the gate looking out upon the dark road that led into the village. Then her eyes wandered away beyond Banley, and out towards the hill where the haunted house stood. How strange the house looked! How strange the moonlight! How strange the silence!

She had an unaccountable hankering to go to the people there! What would they say when she went to them and told her tale? Would they think her mad or would they take compassion upon her for the sorrow she had undergone, and admit her to their family circle as a welcome and honored guest? Was it likely? Had they ever heard her name? Yet how well she knew them; and how much she could tell of their daily life and habits, from the stern banker down to his favorite daughter, Rose! "Cousin Rose!" Cousin Rose! She said it aloud, and then started and flushed guiltily, lest any one should have heard her.

Some one had heard! Not Mr. Magnus—not even Kitty, but a tall, handsome young man, who had been walking along the public road, with his hands in his pockets and his head bent down. He had passed the garden gate without even looking that way, but the low voice made him start and turn round. In an instant he had turned the iron fence, and stood by Miss Marjorie's side.

"Have I found you at last?" he exclaimed. "I have looked for you all over England, and in vain. Now, Marjorie!"

But Miss Marjorie looked in his face, gave a low cry, and fainted.

He caught her in his arms and kissed her passionately.

"Marjorie, my love, my darling, look up and speak to me!"

Slowly she revived. Slowly she came to the knowledge that life was no longer a blank—that he had returned, and that he loved her still. "Oh," she sighed, "is this a dream?"

"No dream, but truth, my darling!"

"Are you sure? I have dreamed so many times."

"But you are awake now. Awake, to hear me say that I wronged you—that I was a jealous, suspicious fool, to listen to a word against you; awake to see me kneel at your feet and ask your pardon! Look, Marjorie! I won't die till you say you have entirely forgiven me."

"My love—my love!" answered Miss Marjorie, bending over him with a radiant smile. And then the long misery of the past was wiped away and forgotten.

"But where have you been?" she asked, when the first surprise was over. "Where have you been, and how did you know I was here?"

"I have been in Australia, my love. I would not come back till I could lay a fortune at your feet, as some amends for all I have made you suffer—and I can do it now. The money is all here, and I am a rich man, and you shall have a small lake, dress every day, and eat of gold and silver plate. If you like, Marjorie!"

"As if I cared for that!" she said, kissing him.

"No, I know you are not mercenary; but still, money is one of the best things you can have, my child. Money and love—love and money; any one who can get those two things must think himself remarkably well off in this vale of tears, Miss Marjorie! And you have both; and if you don't feel obliged to me for getting them, you are a very ungrateful young woman!"

"Oh, I do, I do, but how in the world did you know I was here?"

"I did not. This is the strangest part of the story. I came home to England lonely and sad enough. For three years in Australia I have been trying to find you out, through agents and advertisements, in vain. Where have you been?"

"I taught in a school at Brighton for two years after I lost you; and then one of the pupils, daughter of this Mr. Magnus—"

"The gentleman who owns this house?"

"Yes; his daughter was educated at that school, and she thought I would make a suitable companion for her mother, who is ill, or who fancies herself so, at least. I have been here a year, I shall leave the place in a month's time."

"In a week—in a day!" was the impatient reply. "Do you suppose I am going to have you slaving here now I am home again? You will pick up your traps to-night and be ready to go with me when I call for you to-morrow, which will be as soon after breakfast as I can get over from Banley. Do you hear?"

"Yes, but I must give some notice."

"Not a bit of it. Are they kind to you?"

"Not very."

"Do you like them?"

"Not at all."

"You don't mean to say that they have ill-used you?"

"Oh, no."

"But, in fact, you hate them?"

"Exactly."

"Poor darling! And you have had a year of this drudgery?"

"Never mind; it is all over now."

"That it is!"

"But finish your story. Tell me how you happened to find me here."

"Do you know that my uncle Cowley is here?"

"Yes."

"Shut up with all his family in a house full of ghosts?"

"I have heard of it."

"I went straight to his house in Micklehampton square, only to find it empty. The housekeeper gave me the present address, and, on reaching Banley, I found his name in everybody's mouth. If he had seen the lights and heard the sounds of life, he would have been a lunatic by this time. In the place of waiting till to-morrow for my visit, I thought I would go to-night, and see if there was any truth in these marvelous tales. And while I was walking along, thinking of ghosts and hobgoblins, I heard a little voice plainly say in the darkness, 'Cousin Rose!—Cousin Rose!'"

It was the voice I had been hungering and thirsting for, and I had been so long and weary years. Now you know the whole. Were you thinking about Rose?"

"Yes."

"You will like her dearly. She is a good little thing, and will make a splendid wife for you. I tell her your story. Will you go there with me to-morrow?"

"Will they welcome me?"

"Of course they will, you goose! Oh, Marjorie! My own Marjorie! They will love you for my sake, even as I love you for your own, you wicked, fascinating, little monster!"

"He! he! he! That's prime!" exclaimed a hoarse voice in the shrubbery, and Marjorie started from her lover's arms.

"Julius, is that you?" she cried.

"I should rather think it was!" the promising youth replied, standing out upon the gravel path. "I've been watching you for ten minutes at the least, and haven't you been going on kissing and hugging! Oh, my! won't mother go to a tantrum when she hears of it! I shan't have to learn any more Latin lessons! You'll have to pack Miss Marjorie, as sure as eggs is eggs! Heigho, jenny, and a rig-dum!"

His exulting dance was speedily brought to an end. Mr. Cowley, who had kept silent so far from sheer astonishment, now grasped him firmly by the collar.

"You young scoundrel!" he exclaimed, "how dare you speak in that manner to Miss Marjorie!"

"She's my governess; I'll say what I like to her!" was the impudent reply.

"And she is my wife! And if you dare to say a word about her—to look at her insolently—to insult her in the smallest way—I'll give you such a flogging that you will never want to utter a lady's name as long as you live! Do you hear, sir? And he shook him in the air as a terrier shakes a rat."

"Oh, my! let me go! I'll call my father!"

"Hold your tongue, you whelp! Where is the key to the garden gate?"

"In the hall, sir."

"Go and get it—and don't let anyone see you!"

"Yes, sir!"

Julius, thoroughly ashamed, ran up the steps, and in a moment reappeared with the key.

"What are you going to do, Charles?" inquired Miss Marjorie, wondering, as he opened the gate and held out his hand to her.

"I am going to take you away with me."

"Impossible."

"I don't know what that word means."

"But I have not even got on my bonnet."

"Never mind, your cloak will protect you, and we have not far to go. Into that house you shall never step again, after the specimen of your treatment I have just seen."

He drew her out upon the footpath, and turned to the boy, who stood with open mouth at the gate.

"Look it, and go in," he said.

"But what am I to say to mother?"

"Tell her that Miss Marjorie has gone away with her husband," was the laughing reply. "Come, my love, draw your cloak well round you. I never ran away with a lady before; but, upon my word, this step of the late Mrs. Magnus is a very pleasant business!"

And so, while Julius ran in with his wonderful news, and sent Mrs. Magnus into a fit of screaming hysterics, the strangely re-united pair walked on arm in arm right through the darkness towards the haunted house.

(To be continued.)

HIS HORSE STOOD SENTRY.

Great Hacer Stood Guard Over His Intoxicated Driver.

This reads like a fairy tale, but it is true. At the sale of the late Marcus Daly's thoroughbreds William Lakeland, one of our well known metropolitan trainers, bought Ogden for \$4,200. This is a valuable horse by Killarney-Orlando, foaled in 1894, winner of the Futurity of his year and many other important events and family figures as well as twelve English Derby winners. All this just to show the kind of gentleman he is. Lakeland wished him taken down to his sheephead stables that night and after a talk with his foreman, Frasch, Ogden was dispatched by road in the care of a colored stable boy, to whom Lakeland gave \$5 as an inducement to take extra care of the horse. Blanketed and hooded from hoofs to ear tips, Ogden serenely watched his way through the falling snow, and doubtless wondered if he were going back to Montana and the familiar Hitter Root farm. Later Mr. Lakeland went home and sat up hour after hour waiting for the coming of his new purchase, but none came. His feelings may be better imagined than described. He loves his horses, as evinced by his wonderful success with Tea Tray and other erratic animals which he brought round to a proper state of mind. He sat up all night, sending messengers in all directions until dawn, and by that time he was ready to take up the quest himself. It was not the money that was worrying him; it was the exposure of a good horse to the inclement weather and what the probable results might prove. Just when he was about to give up, he then came a call from the stable boy, who said his horse was taking care of a rapid gait. The police precinct wanted to know if he had lost a horse and what he was like; reporting that Ogden had been found by an officer standing in the road, with the colored boy drunk at his feet. In other words, the horse was taking care of the drunken boy, as many a horse has done before, and will again, bless them for it! Mr. Lakeland declined to bother with him. He did not want a justifiable case of assault and battery on his hands. He had Ogden and that was all he cared about—Spirit of the Times.

A FAIR OF RENAISSANCE.

Two kites, which were the leading members of a flight of five sent up last summer from the Royal Aeronautical Observatory near Berlin, broke away from their companions, and dragging a long wire which touched the ground and extended two miles behind them, fell before the wind almost 100 miles before they were brought to the end. The resistance of the wire trailing over his head sufficed to keep the kites properly presented to the wind, and their only journey lasted through an entire night. When the kites started on their flight, the men who were to guide them were at a height of more than two and a half miles.

CARRIES A ROW OF BRICKS.

The invention shown below is a device for picking up a row of bricks quickly and transporting them with

SCHOOL EXAMINATIONS.

Some Startling Ideas Expressed by New York Pupils.

There must have been some brain pressure in the public schools of New York in the examinations that were held early this month. It is only on that assumption that one can explain the unique reading of a famous sentence given by a pupil in a Brooklyn school in the examination in English literature.

Stored in some tronser house of mighty kingly.

"The lungs are organs of excretion" was a gem combining ignorance with unconscious truth. It belongs to a youth in England. Richmond Burdett, a pupil of a school in the hard pressed was the subject of his discourse, who answered the question as to why Cornwallis surrendered by saying "Because he could not help himself." The name borough owns the young man who defined pig iron as being the iron "that they make nose rings for pigs of."

A Borough of Manhattan pupil is the one who declared in a composition that "George Washington, after his victory over King George, went home to Mount Vernon, where great crowds met him at the railroad station." Another Manhattan pupil thinks that excommunication is "when a telegraph wire is cut."

It may have been an anti-imperialist who had this to say in an English school the other day about Polynesia: "Polynesia is a group of small islands in the Pacific which are under the protection of the British, otherwise seem very quiet and peaceful." He has a companion in peace-loving. He has a companion in peace-loving. He has a companion in peace-loving.

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SCIENCE AND PROGRESS

species on the head, the legs, the wings, and the hind body. The katy-cases and the cricket, which produce musical tones in the same way, do not belong to the beetle family.

CATARH AND ITS SYMPTOMS.

Catarh is an inflammation of any of the mucous membranes of the body. It is marked by the equal signs of inflammation, and as the word implies—being derived from a Greek word meaning "to flow down"—by a more or less profuse discharge. On the nose gives rise to the catarrh, and the latter, as will be explained later, may be either atrophic or hypertrophic. Acute catarrh unfortunately needs no description, for it is only too familiar to us all as a cold in the head. In this case it is the mucous membrane of the nose which is inflamed, and the only obvious symptoms are swelling of the membrane, which may be so great as to close the nostrils completely, and a profuse discharge. When acute catarrh attacks the pharynx or larynx we have a sore throat, and if the inflammation extends still farther we have bronchitis. In the latter case the most evident sign is a cough, due either to the presence of a mucous discharge, or to irritation caused by the air passing through the inflamed bronchial tubes. In young children the inflammation in the larynx causes the "croup," the wheezing and the difficulty breathing and hoarse voice which characterize one form of croup. If catarrh attacks the stomach it causes severe indigestion, and when the intestinal mucous membrane is affected the most prominent symptom is diarrhea, or the "flux," and acute inflammation of the ear is the expression of catarrh of the ear and the drum of the ear. In chronic catarrh the process is less active; there is usually little or no pain, but the discharge is profuse and thick. In hypertrophic catarrh the mucous membrane becomes permanently thickened, and in atrophic catarrh it is thinned. Atrophic catarrh is not really an inflammation, but rather the result of a previous inflammation which has destroyed the mucous membrane, leaving in its place merely a thin skin, covering the surface, but answering none of the purposes of a mucous membrane. A catarrh may be caused by anything that acts as an irritant to the mucous membrane—rust, sulphurous, ammoniacal, or other strong fumes, undue dryness of the atmosphere, and so forth. In the case of the air-passages or eyes; indigestible food, alcohol, and so forth, in the case of stomach or intestines. Often the inflammation is due to the action of microbes, which are probably always present, but can work harm only when the soil has been prepared for them by mechanical injury, or by congestion caused by a chilling of some portion of the surface of the body.

A LESSON FROM AMERICA.

During the Paris exposition an American firm obtained permission to drive an automobile in the Bois de Vincennes near Paris. The city of Paris has two armies of automobiles, which respectively are six and six years to be driven. The American well was sunk to a nearly equal depth, 1,535 feet, last summer in two months. The French were surprised at the rapidity of the work, as well as by the homeliness and simplicity of the apparatus. The American company has since offered to donate the well to Paris as an addition to its water supply, and some of the French scientific journals express the hope that "the practical lesson which the new world thus offers gratuitously will not be without its fruit."

USE OF ICE IN BRAZIL.

Consumption of ice in Brazil is constantly increasing. This is due principally to the demand for ice in restaurants, hotels and other public places. Foreigners are most insistent in their call for ice. Our consul at Santos is of the opinion that an ice company would prove a profitable undertaking in that place, the use of ice being practically unknown in the fish, vegetable and meat markets. He also thinks the American refrigerator would sell well in Brazil.

INDUSTRIAL INNOVATION.

Consult Nelson of Bergen, under date of January 30, 1901, reports a successful attempt to produce steel by electricity in Sweden. The consul says: "The experiments are being carried on at Gysinge factory, Sweden, and about 25,000 pounds of steel are produced in six days daily. The steel is of an excellent quality and meets with ready sale at high prices. On account of the relatively cheap method of production the profits are large, but as the electrical power is limited, the output is insignificant. To overcome this drawback plans have been formed for the erection of a large electric plant near the Dalsfjorden river, the water power of which will be utilized. This will enable the company to carry on the manufacture of steel by electricity on a large scale."

BROOM AS A DISEASE SPREADER.

Dr. Max Girsandsky holds that the broom far from serving any hygienic purpose is a most potent agent in spreading disease. It being now generally recognized that dust is a most efficient vehicle for pathogenic germs, the use of the broom, he says, serves to stir them up from the corners, nooks and carpets, where they lie comparatively harmless, sending them into the air, where they are blown so that we can breathe our fill of consumption from day to day. It regards the broom as the most important cause of the existence and spread of tuberculosis, and pronounces carpets an unhygienic article that serve as a breeding place for the free use of water as the only proper way to clean floors and streets, and suggests that all floors and floor coverings should be so constructed as to admit of its unrestricted use.—Philadelphia Times.

THE BEST KEYS FOR LAYING ARE THE PLYWOOD KEYS AND THE LEGBONES, but there are other varieties which with proper care and treatment can give a good account of themselves in that line.

MUSICAL BEETLES.

The researches of Mr. C. J. Gahan show that while the structure of the musical or stridulating organs of beetles is extremely simple, they sometimes possess contrivances for varying the pitch. The general structure of such an organ is a hard surface covered with striations, over which some other member of the body furnished with a rasping edge or area is rubbed. When the striated surface is divided into parts by finer and coarser markings, variations of pitch can be produced. The organs occur in various

STAMP AFFIXING MACHINES.

In large offices, where thousands of letters are sent out every day, some sort of a stamp-affixing machine is a necessity, and the more accurately and rapidly it will do its work the better. It is necessary for a boy to feed the stamps, and a batch of letters written late in the afternoon. By the old hand method of affixing the stamps it would require the whole office force to do the work, but shows herewith is a machine which the inventor claims will require next to no attention, the only necessary being a boy to feed the stamps. If the latter could be had in a long strip instead of ten in a row the machine would take care of itself after once started. The machine is designed to be run by a small motor or other belt power, but it may also be operated by foot or hand power. The envelopes are placed in the upright

tube on the right, and are fed across the intervening space to the rollers by an endless belt, which is perforated through the rollers and side-walls, an air cell. From this cell a tube leads to a suction fan, which, being set in motion by the starting of the machine, creates a partial vacuum inside the belt chamber and thus holds the letters firmly on the belt by drawing air rapidly through the perforations. The stamps are suspended in a tray in conjunction with a narrow feed roller, which transfers the stamp past the moisture and delivers it to the envelope at the right instant. The machine is also adapted for the placing of gummed labels on envelopes, and may thus be utilized as an addressing machine.

SIGNALING UNDER WATER.

The late Prof. Elisha Gray, shortly before his death, completed a series of experiments which demonstrated that sound can be readily conveyed to considerable distance through the sea. An 800-pound bell was let down about twenty feet in the water through a hole in a specially constructed vessel, the clapper of the bell remaining under the control of those aboard the ship. When the bell was struck, the sound was plainly heard in the hold of another vessel a mile away. By lowering a speaking trumpet into the water the sound was increased, and the sound three miles and with the aid of an electrical receiver connected with the telephone diaphragm, the strokes of the bell were audible at a distance of twelve miles.

SCIENTIFIC NOTES.

New Spinning Machine.

Some two years ago a resident of Boston, Mass., devised a new spinning machine, which he took with him to Bradford, the center of the spinning industry of Great Britain. There, aided by local engineers and experts, he improved his appliance, which is now in active operation. It is capable of spinning a variety of materials, such as asbestos and peat moss, as easily and readily as wool, and when completed it is difficult to determine the original nature of the fabric.

USE OF ICE IN BRAZIL.

Consumption of ice in Brazil is constantly increasing. This is due principally to the demand for ice in restaurants, hotels and other public places. Foreigners are most insistent in their call for ice. Our consul at Santos is of the opinion that an ice company would prove a profitable undertaking in that place, the use of ice being practically unknown in the fish, vegetable and meat markets. He also thinks the American refrigerator would sell well in Brazil.

INDUSTRIAL INNOVATION.

Consult Nelson of Bergen, under date of January 30, 1901, reports a successful attempt to produce steel by electricity in Sweden. The consul says: "The experiments are being carried on at Gysinge factory, Sweden, and about 25,000 pounds of steel are produced in six days daily. The steel is of an excellent quality and meets with ready sale at high prices. On account of the relatively cheap method of production the profits are large, but as the electrical power is limited, the output is insignificant. To overcome this drawback plans have been formed for the erection of a large electric plant near the Dalsfjorden river, the water power of which will be utilized. This will enable the company to carry on the manufacture of steel by electricity on a large scale."

BROOM AS A DISEASE SPREADER.

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